

## ARAPAHOE BASIN SKI AREA PROJECTS FINAL ENVIRONMENTAL IMPACT STATEMENT









## *DRAFT* RECORD OF DECISION AUGUST 2016



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# ARAPAHOE BASIN SKI AREA PROJECTS FINAL ENVIRONMENTAL IMPACT STATEMENT DRAFT RECORD OF DECISION August 2016

USDA FOREST SERVICE

ROCKY MOUNTAIN REGION

WHITE RIVER NATIONAL FOREST

DILLON RANGER DISTRICT

Summit County, Colorado

Lead Agency: USDA Forest Service

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#### **DRAFT RECORD OF DECISION**

#### INTRODUCTION

This *draft* Record of Decision (ROD) documents my decision to approve proposed projects and activities within Arapahoe Basin's (A-Basin) Special Use Permit (SUP) boundary on the White River National Forest (WRNF) in Summit County, Colorado. My decision is based on, and supported by, the *Arapahoe Basin Ski Area Projects Final Environmental Impact Statement* (FEIS) and the project file.

Arapahoe Basin Ski Area (A-Basin) is located in the Dillon Ranger District of the WRNF, 15 miles east of Dillon, Colorado. A-Basin is approximately one to two hours driving time from the metropolitan Denver area via Interstate 70 (I-70) and Highway 6 (refer to the Vicinity Map in Chapter 6 of the FEIS). It can be accessed via Highway 6 from the west through the Town of Dillon or from the east from Loveland Pass.

A-Basin is owned by Dundee Resort Development, a subsidiary of Dream Unlimited Corporation, and operates under a United States Forest Service (Forest Service) Ski Area Term SUP. A-Basin's SUP covers approximately 1,872 acres of National Forest System (NFS) lands, which encompass 100 percent of the ski area's chairlift/terrain network, parking facilities, infrastructure, and guest services.

#### **PURPOSE AND NEED**

In order to meet the needs and expectations of existing and potential guests and provide a safe skiing experience, the WRNF, through its acceptance of A-Basin's 2012 Master Development Plan (MDP), has identified a need to:

- Provide the Beavers with snow safety operations and ski patrol services consistent with statements made in the 2002 WRNF Forest Plan FEIS.
- Accommodate existing and future demand for high alpine and open bowl skiing while protecting and enhancing the distinctive skiing experience that A-Basin provides.
- Improve access along the 400-foot-long, slightly uphill catwalk from Lenawee Mountain chairlift to Montezuma Bowl.
- Upgrade and remove chairlifts, as needed.
- Provide adventure-based multi-season experiences that require little specialized knowledge, skills, equipment or familiarity with the mountain environment.

#### THE DECISION AND RATIONALE FOR THE DECISION

After thoroughly considering the project Purpose and Need, issues, alternatives, and extensive analyses presented in the *Arapahoe Basin Ski Area Projects FEIS*, as well as the public and agency comments submitted, my decision is to approve Alternative 2. All of the projects approved by my decision are on

NFS lands within 2002 Forest Plan Management Area 8.25 and occur within the A-Basin's SUP boundary.

#### THE SELECTED ALTERNATIVE

My decision to approve the Selected Alternative provides A-Basin with the authorization to implement activities analyzed in detail in the FEIS. In particular, the Selected Alternative includes the addition of approximately 338 acres of skiing terrain in the Beavers, construction of a new chairlift to access the Beavers terrain, a new surface lift to access Montezuma Bowl, replacement of the Molly Hogan and Pallavicini chairlifts, removal of the Norway chairlift, grading projects to improve operational efficiency and skier circulation, and construction of a canopy tour and challenge course. All approved projects will be located within A-Basin's existing SUP area. The Selected Alternative is depicted in the Selected Alternative Figure.

These projects will allow A-Basin to better meet guest expectations and address the project Purpose and Need. Implementation of the projects in the Selected Alternative will also respond to long-term goals and objectives of the 2002 WRNF Forest Plan and new Forest Service direction regarding additional seasonal and year-round recreational activities at ski areas.

#### **DECISION RATIONALE**

The entire Arapahoe Basin Ski Area Projects analysis and public involvement processes were both thorough and informative in making my decision. They provided a foundation for my decision and the project design criteria (PDC) identified in Table ROD-2.

I have carefully reviewed the FEIS and the environmental impacts of this project. The FEIS discloses, using the best available science and information, the qualitative and quantitative effects on the human and biological environment that are anticipated to result with the implementation of the approved projects.

My rationale for choosing the Selected Alternative is based on careful consideration of several key elements addressed during the public involvement and analysis process, including consistency with: the project Purpose and Need, the 2002 WRNF Forest Plan, agency direction for additional seasonal and year-round recreational activities at ski areas, and A-Basin's 2012 MDP.

#### Consistency with the Project Purpose and Need and the 2002 WRNF Forest Plan

I am approving the Selected Alternative because it best meets the project Purpose and Need to meet the growing demand at A-Basin for this terrain type, improve the guest experience across the ski area, and address skier safety within the Beavers terrain. In particular, I believe that adding lift-served terrain in the Beavers will improve the unique recreational experience offered at A-Basin while addressing safety concerns in this area. Summit County Board of County Commissioners, Summit County Sheriff's Office, and Summit County Rescue Group all concur with my understanding and support the Forest Service's and

A-Basin's approach to managing the Beavers terrain. During project site visits, my staff has witnessed guests of A-Basin disembarking the Pallavicini chairlift, sliding to the ski area boundary, ducking the boundary rope and/or exiting through the backcountry access point, and entering the Beavers terrain and Steep Gullies only to return to the ski area. I acknowledge this is great skiing terrain for those that are equipped and prepared; however, the proximity and ease of access (legal or illegal) from the ski area is problematic from a safety standpoint. The Sheriff's Office has provided data that is included in the project file that speaks to the frequency of calls for rescue, as well as the frequency of calls annually confirming that A-Basin ski patrol is leaving the ski area operational boundary to rescue members of the public in the Beavers terrain.

The Forest Service first identified the need for snow safety operations and ski patrol in the Beavers when this area was included in Management 8.25 and A-Basin's SUP area in the 2002 WRNF Forest Plan. I recognize that the proximity to A-Basin makes this area a popular lift-served, backcountry destination, but the difficulty of the terrain poses serious safety risks for the many skiers who currently ski there and hitchhike on Highway 6 back to the base area. The 2002 WRNF Forest Plan includes the following statement in our discussion of potential ski area expansion areas:

"The Beavers are popular with backcountry skiers and snowboarders who access the site from Arapahoe Basin ski area. Steep north-facing chutes above treeline with numerous rock outcrops characterize the terrain. Most skiers hike or hitchhike uphill to return to their vehicles. Avalanche risk to the public is potentially high. The risk could be partially mitigated if the Beavers site was developed for skiing as part of the ski area."

I believe, and the analysis prepared confirms, that incorporating the Beavers into A-Basin's operational boundary (and, therefore, performing snow safety and ski patrol operations) will greatly increase skier safety in this area. Certain members of the community commented that by including the Beavers terrain within the operational boundary will increase accidents within the terrain from guests of A-Basin. I understand this comment from the public; however, in reviewing data provided by Colorado Avalanche Information Center in their comment letter dated March 21, 2016, "In the last ten years, 290 people have lost their lives in avalanches in the United States. One hundred and twenty three of these deaths have occurred during non-motorized recreational activities. Eleven (9%) have occurred within ski areas and 112 (91%) have occurred in the backcountry areas." This speaks to the frequency of avalanches and the importance of avalanche mitigation work that will be performed regularly by A-Basin within the Beavers. Other accidents that may occur at the ski area is an inherent risk of the sport. A-Basin will appropriately sign trails and terrain (e.g., Steep Gullies), which is currently not specifically signed for the public and prepared and ill-prepared members of the public.

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<sup>&</sup>lt;sup>1</sup> USDA Forest Service. 2002. White River National Forest Land and Resource Management Plan 2002 revision. White River National Forest, Glenwood Springs. CO.

<sup>&</sup>lt;sup>2</sup> Green, E. 2016. Colorado Avalanche Information Center. Letter to USDA Forest Service. March 21.

In addition to improving skier safety in the Beavers, the expansion of lift-served terrain in this area will add to the distinctive recreational experience offered at A-Basin. Compared to other ski areas in Summit County and across the WRNF, A-Basin provides a high Alpine setting with a smaller ski area experience. Annual visitation data provided in the FEIS indicates a growing demand for developed, controlled skiing at A-Basin. The ski area is known and appreciated in Summit County and beyond for its high alpine and advanced skiing terrain and unique experience. Further, a specific skiing culture exists at A-Basin that seeks more advanced ability level terrain and low skier densities compared to other ski areas in Summit County and on the WRNF, and I believe my action to approve this project will maintain and improve that culture and market for advanced ability level terrain, as well as provide additional intermediate terrain to allow the Beavers to be skied by a broader spectrum of skiers. Moreover, the terrain in the Beavers will be consistent with the distinctive experience that A-Basin celebrates, will enhance the guest experience, and will allow A-Basin to meet guest expectations into the future with a growing Colorado front-range population.

I understand that the growing and changing ski area market, specifically within Summit County, is frustrating to some members of the public. Ski areas and resorts within Summit County and across the WRNF have increased in size over the past fifteen years. This growth and development has been consistent with projections in the 2002 WRNF Forest Plan. The fact is, the United States public truly loves visiting and recreating on the WRNF and our visitation numbers confirm this fact. A-Basin, being one of the closest ski areas to the growing Colorado front-range communities must also grow within the lands allocated within the 2002 WRNF Forest Plan to match the public's expectations. I know this project and the Beavers terrain will be a huge success with the guests from Summit County and beyond who enjoy recreating at our ski areas on public lands on the WRNF. I have referenced acreages before and it is important context, the WRNF covers over 2.3 million acres of land. Within that, the Forest Plan identified approximately 50,000 acres to be managed specifically for ski areas. These 50,000 acres accommodate over 7,000,000 skier visits on ski areas and resorts each year.

A reality of recreation of any kind on the National Forest in Summit County is the impact to wildlife. During my tenure as the Forest Supervisor of the WRNF I have faced the challenges of balancing multipurpose mission (e.g., recreation, mineral resources, wildlife management, and watershed management) of the National Forest with natural resource effects. In southern Summit County, the challenges are amplified by the abutting residential and commercial growth that is beyond my control. After reviewing the lynx analysis included in the FEIS and Biological Assessment, and through several years of consultation with the U.S. Fish and Wildlife Service (USFWS), I have concluded the need for an amendment to the Canada lynx Standard ALL S1 in the 2002 WRNF Forest Plan as a component of the Selected Alternative. Furthermore, this amendment exempts this specific project and the on-going operation of this project from the requirement of Standard ALL S1 to maintain habitat connectivity within the Lynx Analysis Unit. This is further explained on page ROD-17.

I believe that the other projects included in the Selected Alternative will further improve the guest experience by offering updated and reliable infrastructure, along with improved access to terrain in Montezuma Bowl.

Finally, I believe that the canopy tour and challenge course will provide opportunities for a wide variety of National Forest visitors to engage in outdoor recreation. These activities do not require specialized skills, knowledge, or experience and will allow people to engage with the National Forest in an approachable environment. The style of canopy tour and challenge course envisioned, analyzed, and approved will match the culture of A-Basin. These activities will be appropriate with the setting and experience guests anticipate at A-Basin. Furthermore, additional multi-season activities will allow A-Basin to employ more staff year-round. I've heard through public outreach about how strong a member A-Basin is within the community—from annual charitable contributions to employee satisfaction and benefits. Providing additional summer activities will allow A-Basin to further strengthen its role within the local community.

#### **A Commitment to Minimizing Resource Impacts**

A-Basin and the Forest Service have worked together throughout the EIS process to refine and adjust project designs and locations to minimize impacts to forest resources such as Canada lynx and wetlands. In particular, following the scoping period Alternative 2 was modified to include less tree removal in the Beavers to reduce impacts to Canada lynx habitat and the emergency egress route was relocated to avoid wetlands in the area near the bottom terminal of the Pallavicini chairlift. Additionally, we included numerous PDC (see Table ROD-2) to ensure that impacts are minimized during implementation.

#### Consistency with the Ski Area Recreational Opportunity Enhancement Act

With the passage of the Ski Area Recreational Opportunity Enhancement Act of 2011 (SAROEA) and accompanying agency direction, the Forest Service is embarking on new approaches to introduce the American public to recreational opportunities on NFS lands. While some of these activities are novel to ski resorts and NFS lands in general, they may better engage and resonate with younger generations and new guests.

The language chosen by Congress in the SAROEA and codified by the Forest Service at Forest Service Manual (FSM) 2343.14 is deliberate and clearly intended to provide for local discretion in determining the appropriateness of various summer and year-round activities at individual ski areas. Indeed, in a Statement for the Record submitted in the U.S. Senate on March 22, 2014, Colorado Senator and primary sponsor of SAROEA, Mark Udall, emphasized his advocacy for "a flexible directive empowering local decision-making."

Incorporating considerations provided to me by the Forest Service's Rocky Mountain Region in their review of the activities, my team has completed a comprehensive screening of the activities. As disclosed

in Appendix C of the FEIS, the suite of projects in the Selected Alternative fully meets this agency direction.

In summary, projects included in the Selected Alternative:

- Do not change the primary purpose of the ski area to something other than snow sports. The approved activities will supplement the minimal amount of existing summer visitation and will increase visitation by a small amount when compared to winter use visits;
- Are consistent with the vision, zones, and uses found in A-Basin's 2012 MDP and the 2016 MDP Addendum;
- Occur within the existing SUP boundary;
- Harmonize with the natural environment of the site where they will be located by—being visually
  consistent with or subordinate to the ski area's existing facilities, vegetation, and landscape; not
  requiring significant modifications to topography to facilitate construction or operations; and not
  compromising snow sports operations or functions;
- Encourage outdoor recreation by being located outdoors in a natural setting, and in close proximity to other numerous outdoor recreational opportunities;
- Increase utilization of snow sports facilities and do not require extensive new support facilities, such as parking lots, restaurants, and chairlifts; and
- Enable visitors to engage with the natural setting and may lead them to further explore other NFS lands.

#### **Environmental and Social Impacts**

A-Basin and the WRNF worked collaboratively throughout the process to address potential resource impacts through modified project designs and the requirement for additional PDC. The overall range of alternatives considered during the planning and EIS process, including the alternatives considered but dismissed from detailed analysis, was extensive and informative. Ultimately, the Selected Alternative, coupled with required PDC, reduced environmental impacts compared the initial proposal considered in scoping and the Proposed Action included in the DEIS. I carefully reviewed the FEIS and the environmental impacts associated with all alternatives when making my decision. Similar to environmental impacts, A-Basin and the WRNF worked hard to address and minimize social impacts that are existing and might occur with implementation of the Selected Alternative. A-Basin has committed to implementing the PDCs, some of which are beyond the jurisdiction of the WRNF, to address local community concerns regarding parking, housing, and employment.

There are indeed impacts, as disclosed in the FEIS and the supporting documentation. My decision accounts for all anticipated impacts, positive and negative, that will result from implementation of the Selected Alternative. Overall, I am responsible for balancing the environmental and social impacts with

the benefits the project will provide, including the conservation measures and design elements developed to reduce impacts. The following discussions provide additional detail on my considerations.

#### Effects to Wildlife and Aquatic Resources

The effects to wildlife and aquatic species (including Threatened, Endangered, and Proposed species; Forest Service Region 2 sensitive species; Management Indicator Species; and Migratory Birds) are disclosed in Chapter 3, Section G – Wildlife and Aquatic Resources of the FEIS. The WRNF coordinated throughout the process with Colorado Parks and Wildlife (CPW), and I have included additional timing restrictions and monitoring to reduce, minimize and avoid impacts to a variety of species. I have considered the impacts to federally threatened and endangered species, Forest Service Region 2 sensitive Species and Management Indicator Species in making this decision.

#### Canada Lynx

After carefully reviewing the FEIS and supporting materials, I have determined the Selected Alternative does not meet the intent of the "maintain" term in Southern Rockies Lynx Management Direction ALL S1 Standard, and a Forest Plan amendment is necessary for the following reasons:

- The Selected Alternative will directly affect approximately 63 acres of lynx habitat in a Lynx Analysis Unit that is already highly impacted by multiple human and natural factors.
- The additional skier use within the Beavers will further impair habitat connectivity through the undeveloped portion of A-Basin.
- The combination of increased skier use, permanent habitat removal, and degradation of suitable lynx habitat within the Project Area will cause an overall reduction in the available functional habitat.
- The relatively small, additional, project-related traffic going through the Loveland Pass Lynx Linkage on Highway 6 will have an adverse effect on lynx.

Consequently, the Selected Alternative is "likely to adversely affect" Canada lynx.

Conservation measures have been developed to minimize impacts to Canada lynx and are included in the Biological Assessment that is being reviewed through Section 7 Consultation with the USFWS. Due to the challenges to wildlife habitat that exist within southern Summit County, including extensive dispersed and developed recreation, residential and commercial growth, a large roadway network, and substantial lodgepole pine mortality, I continue to look for opportunities to address project impacts through innovative and collaborative approaches. A-Basin is committed to working with the WRNF to educate the public on the importance of smart, common sense dispersed and developed recreation and the importance of preserving and improving wildlife habitat in key areas. Recreation demand will only continue to grow as the population in Colorado increases; therefore, educating experienced and inexperienced Forest visitors on the importance of appropriate recreation will be important to the long-term balance of

resources in southern Summit County. These measures will be further described with the conclusion of Section 7 Consultation with USFWS and within the Final Record of Decision.

#### Effects to Wetlands and Riparian Areas

The emergency egress and hike-back routes will be located within the riparian area of the North Fork Snake River. A-Basin and the WRNF took the appropriate steps to minimize impacts to watershed resources within this area, including the requirement for over-the-snow tree removal and realigning the egress route to avoid fens and minimize overlaps with wetlands. No direct impacts (i.e., grading/filling) will occur to wetlands as a result of the Beavers project.

Included in the FEIS and this *draft* Record of Decision are PDC that prohibit the placement of canopy tour or challenge course structures within wetlands. Several canopy tour towers were repositioned during the EIS process to avoid impacts to wetlands and/or increase the distance of a tower to a wetland.

The replacement of the Molly Hogan chairlift will result in an impact to a wetland close to the base area. When this chairlift was originally installed in 1978, the bottom terminal was positioned in the wetland. While replacing this chairlift, every effort will be made by A-Basin and the WRNF to minimize the disturbance to this wetland.

#### Effects to Recreation and Backcountry Skiing

As discussed in Chapter 3, Section A – Recreation of the FEIS, as well as my Decision Rationale above, the projects included in the Selected Alternative will allow A-Basin to continue to provide a high quality recreation experience and meet guest expectations and visitation demands into the foreseeable future. By authorizing the implementation of multi-season recreation activities, A-Basin will be able to provide guests of the National Forest unique recreation opportunities in a controlled setting. Other facility upgrades and changes approved with my decision will improve the guest experience and ski area operations.

Throughout the public involvement process I have listened to the concerns of several members of the public that value the existing characteristics of the Steep Gullies and the Beavers terrain, in general. I acknowledge that my decision may change your impression of A-Basin and the experiences that you may have within this area. However, I have also heard from users of this terrain that have explained the reality of this area, which is that the vast majority of people using this area ride the chairlift, ski the terrain, and return to the ski area by the Pallavicini chairlift or traverse through the riparian area and hitchhike back to the ski area. I understand through skier surveys included in the project file that over 15,000 skier laps can occur in this area in a season, so the use is apparent. As I've stated before, I firmly believe the WRNF and Summit County provide an abundant amount of backcountry skiing opportunities. The 2002 WRNF Forest Plan clearly identified 8.25 Management Areas as appropriate for ski area development. The Selected Alternative is within the A-Basin SUP boundary and Management Area 8.25. I realize this is of little consequence to the people who currently use the Beavers terrain within A-Basin's SUP boundary for

backcountry skiing; nonetheless, I am confident we (the WRNF) still provide ample opportunities for this type of recreation within Summit County and across the WRNF.

#### CONCLUSION

My decision is a culmination of a detailed planning and analysis process; many factors have been evaluated over the past four years through the MDP and the EIS processes. I am thankful for the partnership the WRNF maintains with A-Basin and the collaboration A-Basin and the community has demonstrated through this process and the commitments that have resulted. The Selected Alternative best meets the multi-point Purpose and Need while minimize resource impacts.

#### **DESCRIPTION OF THE SELECTED ALTERNATIVE**

The Selected Alternative is a modified version of the proposal included in the November 2013 scoping process. Additionally, the Selected Alternative also includes additional requirements to minimize impacts to various resources, compared to the Proposed Action included in the DEIS (refer to Table 2-2 of the FEIS and Table ROD-2 of this document).

The Selected Alternative includes approximately 338 acres of skiing terrain accessed by a new chairlift in the Beavers; a new surface lift to improve access to Montezuma Bowl; replacement of the Pallavicini and Molly Hogan chairlifts; removal of Norway chairlift; grading at the summit of Lenawee Mountain, Pallavicini, and Beavers chairlifts; a canopy tour; and a challenge course. The Selected Alternative is depicted in the Selected Alternative Figure.

Based on analysis included in the DEIS, FEIS, the Biological Assessment, and on-going Section 7 Consultation with USFWS, I have made the informed decision to include a Forest Plan Amendment with the Selected Alternative. Additional information is provided in the "Decision Rationale" section, above, as well as in the "Forest Plan Amendment" discussion further in this document.

#### **Terrain**

The Selected Alternative will expand A-Basin's operational boundary by approximately 492 acres and will result in approximately 338 additional acres of skiable terrain in the Beavers area.

Table ROD-1 provides a breakdown of the approximate skiable acreage by terrain type that will be incorporated into A-Basin's operational boundary under the Selected Alternative. Note that the approximate acreage of skiable terrain is smaller than the extent of the operational boundary. The reader is directed to Selected Alternative Figure for the location of these areas. Terrain throughout the Beavers will only be used during the ski season, although summer trail maintenance will occur, as needed.

Table ROD-1: Alternative 2 Terrain Breakdown

Terrain Type	Approximate Skiable Acreage
Traditional Trails (Trails B-2, B-4, and B-3 Upper)	38 acres
Beaver Bowl	91 acres
Tree Skiing (Trails B-1 and B-3 Lower, Areas A, B, and C)	57 acres
Steep Gullies (hike-back terrain)	153 acres
TOTAL	338 acres

*Note*: Due to rounding, the total is less than the sum of all components.

#### Traditional Trails (B-2, B-4, and B-3 Upper)

Three defined trails (B-2, B-4, and the upper portion of B-3) are approved in the Beavers, totaling approximately 38 acres of skiable terrain (composed of 13 acres of intermediate and 25 acres of advanced-intermediate terrain). The upper sections of these trails will descend through the open terrain of Beaver Bowl (approximately 7 acres) where no vegetation removal will be required. The lower sections of Trails B-2 and B-4 will be traditional trails, fully cleared of vegetation. The lower portion of B-3 will be tree skiing. Approximately 2 acres of grading will occur along the open bowl portions of Trails B-2 and B-4. In addition, the cleared chairlift corridor of the Beavers chairlift will provide advanced-intermediate level skiable terrain (approximately 2 acres), and is included in the above totals.

#### Tree Skiing Trails (B-1 and B-3 Lower)

Trails B-1 and B-3 Lower will result in approximately 12 acres of expert skiing terrain. The upper portions of these trails will be located in Beaver Bowl and will not require vegetation removal. The lower sections will be constructed as tree skiing trails, and approximately 20 to 25 percent of tree basal area will be removed from a corridor approximately 100 feet wide.

#### Beaver Bowl

Approximately 91 acres of open bowl skiing will become lift-served in Beaver Bowl (in addition to the upper portions of Trails B-1 through B-4, described above). Although the upper portions of Trails B-1 through B-4 will descend through Beaver Bowl (rated intermediate through expert), the majority of the terrain in, and below, Beaver Bowl will remain undeveloped and rated as expert.

#### Tree Skiing (Areas A, B, and C)

The Selected Alternative will include tree skiing opportunities throughout the areas labelled as "A," "B," and "C" on the Selected Alternative Figure resulting in approximately 45 acres of expert level skiable terrain. Fall lines have been identified in each area, and approximately 15 to 20 percent of tree basal area throughout 100-foot-wide corridors associated with each fall line will be removed.<sup>3</sup> Below tree skiing

<sup>&</sup>lt;sup>3</sup> Selective removal of individual trees for tree skiing throughout these areas will focus on dead and hazard trees first, followed by removal of other trees, where necessary.

area "C," a catchment line will guide descending skiers back to the bottom of the Beavers chairlift (refer to the Selected Alternative Figure). The catchment line will be flagged and signed identifying the SUP boundary and last way back to the chairlift. The catchment line will be approximately 10 feet wide to accommodate ski patrollers towing toboggans; this path will require limited and incidental tree removal.

#### Steep Gullies and Traverses

Approximately 153 acres of expert terrain in the Steep Gullies will be created that will require hiking back to A-Basin's chairlift network. In contrast to the Beavers where skiers could round-trip ski Beaver Bowl and associated terrain via Beavers chairlift, skiers will be required to hike out of Steep Gullies to return to the Pallavicini chairlift. Skiers could enter Steep Gullies from the ridge between the top terminals of Pallavicini and Beavers chairlifts, ski Steep Gullies, and hike out to the Pallavicini chairlift. Two egress traverses (upper and lower) and one emergency egress route, depicted on the Selected Alternative Figure, will guide descending skiers back to the Pallavicini chairlift. Topography in the area will prohibit skiers from returning to the bottom terminal of Beavers chairlift once they have entered Steep Gullies terrain. Refer to the Selected Alternative Figure for the location of the approved skier traverses.

The upper and lower egress traverses will be flagged to alert descending skiers to their locations and will merge with the emergency egress route leading to the bottom terminal of the Pallavicini chairlift (see description of the emergency egress route). The upper traverse will be 3 to 5 feet wide, and will be constructed over the course of several seasons in order to establish the most appropriate, and natural, route out of the area. The lower traverse will be approximately 10 feet wide to accommodate ski patrollers towing toboggans, until it intersects the hike-back route, which will share the emergency egress route. Minimal spot grading will be required in two locations along the lower traverse and will be performed using hand tools or low-impact machinery (e.g., spider hoe). Both traverses will be constructed with limited tree removal.

#### Emergency Egress

To accommodate evacuation of injured skiers by A-Basin ski patrol or the need to evacuate skiers due to a lift failure, an emergency egress route is approved in the Beavers. As depicted on the Selected Alternative Figure, the emergency egress route will connect the bottom terminal of the Beavers chairlift to a hike-back route that leads to the bottom terminal of the Pallavicini chairlift. This route will be clearly marked as the edge of the operational boundary and groomed. The emergency egress route will be constructed to a width of 25 feet to accommodate snowcats. Approximately 4 acres of tree removal (conducted over-the-snow, followed by flush cutting in the summer) will be necessary to construct this route, with approximately two locations of "spot grading" (performed by hand or low-impact machinery) to remove incidental obstacles.

#### Picnic Table Decks

Two picnic table decks will be constructed in the Beavers to provide places for skiers to rest and enjoy the scenery. The deck locations will take advantage of the high alpine views and natural windbreaks (refer to the Selected Alternative Figure for approximate locations). Each deck will be constructed of wood with concrete footers measuring approximately 12 feet by 20 feet to accommodate two to three picnic tables and chairs.

#### **Chairlifts**

The Selected Alternative includes one new chairlift, one new surface lift, two chairlift replacements and the removal of one chairlift.

#### Beavers Chairlift

This approved fixed-grip (three- or four-person) chairlift will serve intermediate, advanced-intermediate, and expert terrain. The chairlift will gain approximately 1,500 vertical feet and will be designed with an hourly capacity of 1,800 people. Approximately 3 acres of tree clearing will be required for the chairlift corridor and the bottom terminal, and grading will be necessary at the top and bottom terminal locations (approximately 0.3 acre and 1 acre, respectively). Between the approved top terminal location of the Beavers chairlift and the Lenawee Mountain and Zuma chairlifts, an area of approximately 0.5 acre will be graded to facilitate skier circulation. Small chairlift operator's shelters will be located at both the top and bottom terminals. The shelters will resemble the existing operator's shelter at the bottom of the Zuma chairlift.

The Beavers chairlift will not operate outside the ski season, although summer chairlift maintenance will occur. For power, a roughly 400-foot-long underground spur from the Lenawee Mountain chairlift will be installed to the top terminal of the Beavers chairlift. No power will be connected to the bottom terminal. A composting toilet will be in the bottom terminal operator's shelter for employee use only.

#### Zuma Access Surface Lift

A surface lift (approximately 360 feet long) will be installed on the catwalk alignment to carry skiers from the Lenawee Mountain chairlift to the top terminal of the Zuma chairlift. Skiers returning to the front side from the Zuma chairlift will continue to ski, as the slope is slightly downhill in this direction. The approved surface lift alignment will overlap the existing maintenance road, requiring less than 0.5 acre of grading to re-contour the areas surrounding the top and bottom of the surface lift. Excess material generated from re-contouring will be spread along the northern edge of the maintenance road to widen the skiable platform, further improving skier accessibility. The placement of this surface lift will not affect winter or summer vehicle movement.

Power for the surface lift will tie into the top terminal of the Lenawee Mountain chairlift. The power line will be buried in the existing access road.

A chairlift operator's shelter will be constructed at one end of the surface lift to provide shelter for employees.

#### Pallavicini and Molly Hogan Chairlift Replacements

Pallavicini and Molly Hogan chairlifts (including operator's shelters) will be replaced in their existing alignments with chairlifts that will provide similar hourly capacities (1,200 and 1,000 people-per-hour, respectively) to the chairlifts that are in place today.

#### Norway Chairlift Removal

The Norway chairlift (including operator's shelters) will be removed, rather than replaced, for two reasons: 1) its redundancy with the Lenawee Mountain chairlift; and 2) potential transition of some Lenawee Mountain/Norway area skiers to the Beavers, further decreasing the utility of this chairlift. Removal of the Norway chairlift will only occur following installation of the Beavers chairlift and replacement of the Pallavicini chairlift.

#### Pallavicini Grading

The ridgeline above the top terminal of the Pallavicini chairlift will be graded to facilitate the establishment of a seasonal "snow road." The graded area will be approximately 350 feet long and approximately 0.5 acre. Once the area is graded, no further ground disturbance will take place and vegetation will be allowed to reestablish.

#### **Backcountry Access**

With incorporation of the Beavers into A-Basin's operational boundary, the three Forest Service-designated backcountry access points into the Beavers will be removed. A new designated backcountry access point to the Rock Pile will be added, as shown on the Selected Alternative Figure, to maintain backcountry access to terrain east of the SUP boundary. All other access points, including the existing backcountry access points to Thurman's Bowl and below Montezuma Bowl, will remain.

#### **Ski Patrol**

Even though the Beavers is outside of A-Basin's operational boundary and A-Basin does not currently provide snow safety or ski patrol activities in that area, the ski area has been monitoring the snowpack and snow conditions in the Beavers for multiple years. Therefore, A-Basin has an understanding of the snow safety operations that will be necessary to open this area to lift-served skiing. To accommodate the additional ski patrol and snow safety program in the Beavers, the Snow Plume Refuge (near the top of the Norway chairlift) will be expanded to provide storage facilities for toboggans and equipment at the summit of the ski area. The facility expansion will be approximately 600 square feet, and no tree removal will be required.

Also, a new explosives magazine and makeup room will be necessary near the top of the Steep Gullies. The magazine (a box-shaped structure) will measure approximately 5 feet by 5 feet by 5 feet. The makeup room building will be approximately 6 feet by 10 feet with siding and color that will blend in with the surrounding landscape. The building will have either solar panels on the roof or a small wind generator to power lighting.

#### **Multi-Season Recreation Activities**

A-Basin proposes to implement a multi-season recreational activities program that includes a canopy tour and a challenge course. These activities could be operated year-round, with some seasonal closures based on weather and demand. Each of these activities will operate during daylight hours. The activities will not close existing ski trails.

The Selected Alternative Figure identifies the locations of the approved canopy tour and challenge course east of, and below, the Black Mountain Express chairlift.

#### Canopy Tour

The canopy tour will begin northeast of the top terminal of the Black Mountain Express chairlift. On the canopy tour, guests will descend through thirteen towers via nine interlinked zip lines, other aerial features, and hiking paths while escorted by A-Basin guides back to the base area. The canopy tour will incorporate a mix of hiking paths, bridges, and, potentially, smaller zip lines between stations, thus providing a range of experiences for users. From the top station, the tour will travel through existing skiing terrain and will roughly follow the *Chisholm* and *Wrangler* ski trails. The canopy tour will last for approximately three hours. The canopy tour will incorporate interpretive and education elements, potentially including topics such as natural resource management or environmental sciences. The canopy tour could accommodate approximately 24 people-per-hour, and 192 people-per-day.

Because individual trees in the spruce/fir forest throughout the Project Area are not large enough to serve as stations/anchors for individual zip lines, cables will be connected to specialized towers that are fitted with elevated platforms. Natural features, such as topography and vegetation, as well as proximity to access roads, trails, and chairlifts will determine the exact height of each individual zip line; however, each tower and zip line will be approximately 25 feet above the ground. Each station will have a platform approximately 12 feet by 12 feet. The stations will be constructed of wooden and/or natural-looking materials to the extent possible. Guy wires from each station will be required for structural stability. Fencing will enclose the areas where the guy wires tie into the ground. Fences will be primarily located on the uphill side of guy wires and stations and could be visible from nearby skiing terrain; however, the stations will be set against or in tree islands and the fencing will blend with the tree island background.

Construction of the towers will require selective vegetation clearing within an approximate 35-foot radius of the towers, as well as construction/access routes that are necessary to build and maintain the towers and can be used if evacuation is necessary during a tour. Most zip line segments will require corridors of

vegetation removal approximately 10 feet wide through the forest canopy to ensure the safety of riders. Construction/access routes will typically coincide with the clearance zone along the canopy tour route. This project will require approximately 2 acres of disturbance, including tree removal and grading for tower construction.

#### Challenge Course

A skills-based challenge course is approved east of the lower section of Black Mountain Express chairlift within a series of tree islands. The challenge course will consist of both elevated and ground-based elements/obstacles using a variety of materials including trees, utility poles, and steel structures. The challenge course will contain multiple route options with varying degrees of difficulty and will be designed to accommodate all ranges of ages and skill levels. The high elements of the course will incorporate belay and safety systems using wire lines, friction devices, and climbing harnesses.

The challenge course will be designed to blend with surrounding vegetation and landscape features. In order to retain existing visual quality, elements will be constructed to harmonize with existing natural surroundings and will be located within/between existing tree islands. Each tower will require concrete foundations. The challenge course will result in approximately 0.5 acre of ground disturbance. Upon construction completion, disturbed ground will be revegetated. The challenge course will be integrated into the tree islands, with minimal tree removal.

#### **Construction Practices**

No new roads will be necessary for construction of any of the approved projects. A-Basin's existing road network provides sufficient wheeled access to the top of the mountain and nearly all project locations. Low-impact machinery (e.g., a spider hoe) can be walked down steep terrain to assist in chairlift and trail construction. Helicopters will be used for transport/installation of heavy infrastructure.

#### Trails

Approved tree removal for skiing terrain in the Beavers will be accomplished over-the-snow and on dry ground. No skid roads will be constructed. Vegetation removal for flat portions of the emergency egress and hike-back routes will be conducted over-the-snow with at least a 3-foot snowpack and prior to May 1, followed by flush-cutting in the summer. This practice will allow timber to be removed via snowcat along the hike-back route to avoid impacts to wetlands. Vegetation will be removed from the steep portion of the emergency egress route (below the bottom terminal of the Beavers chairlift) during the summer and will be pile burned on-site or removed via helicopter on steeper slopes.

Trails B-2 and B-4 (refer to the Selected Alternative Figure) will be clear cut during the summer months and the timber will be disposed of by pile burning, chipping, or helicopter logging (on steeper slopes). A masticator could be used on a spider hoe. While removed vegetation will be primarily flush-cut, there could be minimal treatment of stumps (including treatment with a mastication implement or spider hoe) that will otherwise pose a safety risk to skiers. For the graded sections of Trails B-2 and B-4, earthwork

will be accomplished by the spider hoe and explosives to loosen the soil to facilitate the process and to minimize the access footprint.

Tree skiing Trails B-1 and B-3, tree skiing centerlines, and the tree skiing catchment line (refer to the Selected Alternative Figure), will be hand cut and the vegetation will be burned in smaller piles along the trails within openings cleared for skiing.

Rock blasting will be employed as necessary within the Project Area to remove rock outcroppings. Specific occurrences and locations will be identified prior to construction to ensure direct and indirect effects are minimized.

#### Chairlifts

All chairlift projects will be accessed via existing mountain roads, where available; no new roads are approved. Construction of the Beavers chairlift and replacement of the Pallavicini and Molly Hogan chairlifts will occur using existing on-mountain access roads, a spider hoe, and helicopters. A spider hoe will be used over dry ground to dig tower foundations and grade the terminal locations. Construction of the Zuma Access surface lift will occur using existing on-mountain access roads.

#### Multi-Season Recreation Activities

The location of the challenge course is easily accessible from the base area, and construction will be accomplished using existing on-mountain access roads. The majority of the approved canopy tour towers are accessible via existing on-mountain access roads. Construction of certain towers will most likely be completed over-the-snow to minimize resource impacts. Materials and low-impact machinery will be transported to the tower locations on existing on-mountain roads or in the 10-foot-wide clearance zone.

#### **Forest Plan Amendment**

A Forest Plan Amendment is a component of the Selected Alternative. A Forest Plan Consistency Analysis was prepared, which considers the alternatives in the context of the applicability and relevance of each standard and guideline contained in the 2002 WRNF Forest Plan, as amended. An inconsistency has been identified between the Selected Alternative and Standard ALL S1, pertaining to Canada lynx habitat connectivity. Standard ALL S1 (excluding technical footnotes) is:

New or expanded permanent developments and vegetation management projects must maintain habitat connectivity in an LAU [lynx analysis unit] and/or linkage area.<sup>4</sup>

Detailed analysis regarding the Forest Plan Amendment is provided in Chapter 3, Section G – Wildlife and Aquatic Resources and Appendix B of this FEIS.

<sup>&</sup>lt;sup>4</sup> Standard ALL S1 is contained in the Southern Rockies Lynx Management Direction ROD, which amended the 2002 Forest Plan for lynx direction.

In accordance with Forest Service Handbook (FSH) 1926.5, I am approving this forest plan amendment which site-specifically removes the applicability of Standard ALL S1 for this project. In accordance with FSH 1926.51 and 1926.52, I have determined that the change to the WRNF Forest Plan is not significant. Furthermore, the Forest Plan Amendment is a site-specific, one-time exemption from Standard ALL S1 for this project at A-Basin. Thus, the action will not significantly alter the multiple-use goals and objectives for the long-term land and resource management of the WRNF.

#### **MANAGEMENT REQUIREMENTS**

All PDC that are included in Table ROD-2 are hereby incorporated into the Selected Alternative.

## Table ROD-2: Project Design Criteria Incorporated into the Selected Alternative

#### RECREATION

Where appropriate, fencing, flagging, signage and other safety mechanisms will be used to alert skiers to the location of canopy tour stations, guy wires, challenge course structures, and other infrastructure.

Partnerships to foster local/youth programs, programs for disabled individuals, and opportunities for at-risk youth are encouraged.

#### SCENERY

Prior to development of above ground structures, facilities, features, including bridges, towers, chairlift structures, canopy tours, etc., design plans will be reviewed and approved by the Forest Service as part of the WRNF Design Review Process. The proposed structures must meet the BEIG guidelines. The BEIG is found at http://www.fs.fed.us/recreation/programs/beig/.

Choose structure design, scale, and color of materials, location, and orientation to meet the scenic integrity level of the Project Area.

Stumps must be cut as low as possible to the ground to avoid safety hazard and lessen scenery impact.

All structures, facilities, features including bridges, towers, chairlift structures, zip lines, canopy tours, and all other above ground features will meet color guidelines. Bright colors are inappropriate for the forest setting. The colors must be muted, subdued colors because they blend well with the natural color scheme. The FSH 617, "National Forest Landscape Management for Ski Areas, Volume 2, Chapter 7," refers recommended colors for ski areas.

All structures, facilities, features including bridges, towers, chairlift structures, canopy tours and all other above ground features will meet reflectivity guidelines. This includes any reflective surfaces (metal, glass, plastics, or other materials with smooth surfaces), that do not blend with the natural environment. They must be covered, painted, stained, chemically treated, etched, sandblasted, corrugated, or otherwise treated to meet the solar reflectivity standards. The specific requirements for reflectivity are as follows: Structures with exteriors consisting of galvanized metal or other reflective surfaces will be treated or painted dark non-reflective colors that blend with the forest background to meet an average neutral value of 4.5 or less as measured on the Munsell neutral scale.

Trees will be retained, where possible, to provide species and size diversity, maintain forest cover, and screen facilities.

Avoid straight edges where removing trees. The edges of the tree clearing areas, where the vegetation is removed, need to use a variable density cutting (feathering) technique applied to create a more natural edge that blends into the existing vegetative, where possible. Edges will be non-linear, and changes in tree heights along the edges of openings will be gradual rather than abrupt. Soften hard edges by selective removal of trees of different ages and heights to produce irregular corridor edges where possible.

Utilities must be buried as per Forest Plan Standard.

All facilities including trails and signs must meet Forest Service Accessibility Guidelines. Forest Service Outdoor Recreation Accessibility Guidelines: <a href="http://www.fs.fed.us/recreation/programs/accessibility/">http://www.fs.fed.us/recreation/programs/accessibility/</a>

#### PARKING AND TRAFFIC

The WRNF encourages A-Basin to achieve the following goals year 2020:

- Increase Summit Stage ridership to 40 people-per-hour,
- Increase discounted carpool lift tickets by 50%, and
- Conduct more frequent vehicle surveys and develop plan to increase "per vehicle ridership."

## Table ROD-2: Project Design Criteria Incorporated into the Selected Alternative

#### **CULTURAL RESOURCES**

Although site-specific surveys have been conducted, if undocumented historic and/or prehistoric properties are located during ground disturbing activities or planning activities associated with approved construction activities, such undocumented properties would be addressed as specified in 36 CFR 800.11 concerning Properties Discovered During Implementation of an Undertaking.

#### VEGETATION

#### **Rare Plants**

Before implementing any approved project activities not included in the 2013 botanical survey area, the specific Project Areas will be surveyed using established protocols. Surveys would be conducted for Threatened, Endangered, Proposed and Candidate Species, Region 2 (R2) sensitive species, SOLC, and SIVC. Surveys will be completed prior to construction in all Project Areas with potential *Botrychium* habitat.

If any previously unknown occurrences of R2 sensitive, SOLC or SIVC plants are encountered within the project footprint prior to or during project implementation, a Forest Service Botany Representative will be notified to derive suitable mitigation measures to avoid or minimize impacts as appropriate.

Minimize and avoid impacts to habitat occupied by relatively common *Botrychium* spp. (SOLC), and that provides habitat for R2 sensitive moonworts.

Use construction fencing or other barriers to delineate occupied moonwort habitat adjacent to ground disturbance areas and direct construction personnel to avoid parking or storing materials in these areas.

#### **Forest Health and Revegetation Practices**

Draft and implement a Post-construction Revegetation and Rehabilitation Plan, as outlined under "Soils."

To prevent an increase and buildup of spruce bark beetle populations, adhere to the following relating to live Engelmann spruce felled in conjunction with glading, trail construction and other improvements:

- 1. Where live Engelmann spruce greater than 8-inch diameter at breast height (DBH) are felled and left in place, limb entire tree to a 6-inch top diameter, peel or strip bark from bole of tree on 70% or more of the surface area of the tree.
- 2. Where live Engelmann spruce greater than 8-inch DBH live are piled for burning, complete burning within one year of felling/piling trees.
- 3. Where feasible, remove all live Engelmann spruce greater than 8-inch DBH from ski area SUP for processing into lumber or biomass within one year of felling.

Minimize overstory vegetation removal for canopy tour towers 8 and 9, in the vicinity of the *Chisolm* and *Moose Hollow* ski trails, while maintaining skier safety and circulation.

#### **Noxious Weeds**

Follow the WRNF noxious weed recommended design features to avoid the spread of noxious or other undesirable weed species and to manage existing populations toward eradication or acceptable levels when eradication is not realistic.

Pretreatment of existing infestations with approved herbicides within the Project Area must be conducted prior to project implementation. Herbicide choices and application rates for treatment are available from the District/Forest Weed Program Manager.

Clean Equipment. Ensure that prior to moving onto NFS lands, all off-road equipment is free of soil, seeds, vegetative matter, or other debris that could contain or hold noxious weed seeds. "Off-road equipment" includes all construction machinery or off highway vehicles, except for trucks, service vehicles, water trucks, pickup trucks, cars, and similar vehicles. The project administrator will inspect the equipment prior to entrance onto the Forest to see that it is free of debris.

## Table ROD-2: Project Design Criteria Incorporated into the Selected Alternative

#### RIPARIAN AREAS AND WETLANDS

A CWA Section 404 Permit would be obtained from the USACE prior to disturbance to wetlands associated with the removal and replacement of the Norway, Molly Hogan, and Pallavicini chairlifts. The 404 Permit may require the preparation and approval of a mitigation plan for impacts wetlands or other waters of the U.S. (WOUS). This mitigation plan will also be submitted, reviewed, and must be approved by the Forest hydrologist, or their representative prior to implementation. There will be no net loss of wetlands, as required per Forest Service and Summit County wetlands policy.

Prior to implementation, photos would be taken of points of areas where the proposed emergency egress and hike-back routes would interface with existing wetlands, which would document pre-construction wetland conditions. Subsequent to the construction of the emergency egress and hike-back routes, photos would be taken at the established points to document effects. These photos and construction effects will be included in a report and transmitted to the EPA for review. Should effects of the project be beyond those anticipated in this FEIS, the Forest Service, A-Basin, and EPA would work collaboratively to mitigate unanticipated impacts onsite.

Prior to project implementation, identify and mark the location of seeps and springs associated with wetlands and fens in the emergency egress and hike-back routes. Ensure that location markers will be visible during over-the-snow operations. Conduct over-the-snow operations to avoid damage to seeps and springs.

Conduct tree removal in the Beavers area and along the emergency egress and hike-back routes when snow depth is 3 feet or greater and prior to May 1. Monitor over-the-snow tree skidding and adjust operations so wetland impacts are avoided.

Ensure a no net loss of wetlands within the Project Area through avoidance, minimization, and mitigation measures.

Ensure that no impacts to wetland fens occur. More specifically, no grading, tree clearing, vegetation trimming, or access routes will be permitted in any wetland fen. Maximize distance between areas of overstory vegetation removal and delineated fen wetlands, taking into consideration topography, design limitations, and other resource impacts (e.g., grading). Vegetation removal for flat portions of the emergency egress and hike-back routes will be conducted over-the-snow with at least a 3-foot snowpack and prior to May 1. All fens adjacent to proposed project activities will be delineated and clearly marked by a qualified individual(s) prior to construction and all construction personnel will be notified to avoid impacting such areas. Any other wetland to be avoided within and/or adjacent to Project Area activities will also be delineated and flagged by a qualified individual(s) prior to construction.

To avoid and minimize impacts to riparian areas and wetlands, consider alternative timber removal/disposal methods (e.g., pile burning in areas furthest from Pallavicini chairlift). If additional burning is considered, a monitoring and rehabilitation plan will be developed to ensure protection of wetlands.

Flush-cut and leave stumps and root wads intact within wetlands, except in areas identified for grading activities (bottom terminal replacements for Pallavicini and Molly Hogan chairlifts).

Slash and debris will not be placed in wetlands.

Utilize BMPs to prohibit sediment migration from ground disturbances into wetlands or streams.

Avoid and minimize wetland impacts during final submittal of construction plans and in the field.

Before project implementation, clearly mark wetlands boundaries within the vicinity of any ground disturbing activities to implemented in the summer construction season and ensure that all equipment operators are aware of their presence. Keep ground vehicles out of wetlands unless protected by at least 3 feet of packed snow or where a temporary wetlands crossing is approved by the Forest. For approved temporary crossings, lay down construction mats or other physical barriers to protect against soil displacement and minimize the number of passes. Do not disrupt water supply or drainage patterns into wetlands.

Temporarily place construction spoils in upland areas in locations that will not migrate to wetland areas.

Stockpile topsoil during construction and replace in order to preserve the wetland seed bank.

## Table ROD-2: Project Design Criteria Incorporated into the Selected Alternative

Preserve and replant woody vegetation (e.g., Salix) and plant additional hydrophytic woody and herbaceous vegetation where necessary in order to speed the recovery of the wetland community.

For ongoing operations: Do not operate snowcats, snowmobiles or other machinery in wetlands unless protected by 2 feet of packed snow. Cease operations when snow cover is not adequate to protect wetland soil from disturbance.

A-Basin and the Forest Service will work collaboratively to ensure the snow removal, storage, and disposal plan minimizes impacts to water quality to the greatest extent practicable.

#### **AIR QUALITY**

Site improvements would be installed promptly in order to reduce the potential for dust emissions. The area disturbed by clearing, earth moving, or excavation activities would be kept to a minimum at all times, allowing improvements to be implemented in sections.

Grading areas, including chairlift terminal areas, would be watered as necessary where road access is available to prevent excessive amounts of dust. In the absence of natural precipitation, watering of these areas would occur as practical.

Pile burning of cleared timber will adhere to the State of Colorado Burn Permit. Prior to burning timber, A-Basin must consult with the WRNF on size and timing of burning.

#### **SOILS**

Prior to approved construction activities on NFS lands, A-Basin will prepare the following plans for Forest Service review:

- 1. Grading
- 2. Stormwater Pollution Prevention Plan, Erosion Control, and Drainage Management
- 3. Post-construction Revegetation and Rehabilitation
- 4. Construction Management

The grading, erosion control and drainage management, and post-construction revegetation and rehabilitation plans could be contained in the construction management plan. Plans must be submitted by A-Basin to the mountain sports ranger by April 1 of the intended construction season.

A Grading Plan will be required for all projects with major earthwork, or at the discretion of Forest Service officials.

- A grading plan will be prepared for sites that would require grading in excess of 2,000 square feet. Portray existing topography and cut/fill areas on large-scale site plans. Define grading limits on the ground before construction by placing stakes, flagging, wattles, sediment fence, construction fence or some physical barrier along the perimeter of the area to be graded. Ensure that all grading is confined within the specified grading limits.
- For grading projects greater than 1 acre, prepare an erosion control plan that, at minimum, meets the basic requirements for stormwater permitting through the State of Colorado Stormwater Management Program.

The Erosion Control and Drainage Management Plan will contain:

- Silt fences, straw bales, straw wattles, and other standard erosion control BMPs to contain sediment onsite.
- Erosion-control matting on steep fill slopes (i.e., land with a slope angle of 35% or greater) will be utilized to protect soils and enhance conditions for vegetation re-establishment. Biodegradable netting (erosion control blankets and matting) should be used; netting should be free of persistent plastic/polypropylene materials.
- Slope movement monitoring protocols, which will be developed in coordination with the Forest Service soils/geology staff or their representative. These protocols will be implemented during construction and during post-construction monitoring.

#### **Project Design Criteria Incorporated into the Selected Alternative**

- A condition to return slash and native organic litter to site, apply imported soil organic matter, and use soil fertility to restore site organic matter and nutrients. No-net loss of soil organic matter (mineral A and/or organic O horizons) will be ensured through pre- and post-construction soil monitoring and subsequent reclamation, if necessary.
- A condition to stockpile topsoil during construction, maintenance, and operations to the extent possible to maintain organic matter. Re-spread this material following construction and augment with Forest Service-approved soil amendment after post-construction soil organic matter transects are completed.

The Post-construction Revegetation and Rehabilitation Plan will contain:

- Documentation/findings of soil surveys to measure soil organic matter depths within areas of disturbance.
- A list of materials to be used for site stabilization and revegetation (i.e., soil amendments, seed mixes, erosion control blankets). Seed mixtures and mulches will be free of noxious weeds. To prevent soil erosion, non-persistent, non-native perennials or sterile perennials may be used while native perennials become established. The Forest Service must approve the seed mixtures prior to implementation, unless previously approved seed mixes are employed.
- A monitoring protocol for vegetative cover standards from the WRNF Forest Plan to be implemented for a minimum of three years following seeding. Monitoring will include the presence of invasive plants, and retreatment of invasive plants as necessary.

Areas determined to have been compacted by construction activities may require mechanical subsoiling or scarification to the compacted depth to reduce bulk density and restore porosity.

Ground cover, as a combination of revegetation, organic amendments and mulch applications, will restore depths of soil A and/or organic ground cover.

Reclaim disturbed areas promptly when use ends to prevent resource damage and invasion of noxious weeds. Ensure proper drainage, rip compacted areas, and apply a Forest Service-approved seed mix and organic soil amendments to facilitate revegetation.

Details of timelines, contractors to perform work tasks, seed mixes, soil amendments, and necessary surveys will be provided to the mountain sports administrator no later than April 1 of the intended construction season.

Design, implementation, and monitoring roles and responsibilities will be clearly defined and included in the construction management plan, submitted by April 1 of the intended construction season.

Prior to construction, soil surveys will be completed within the disturbance area to ensure no net loss of soil organic matter. Personnel responsible for these surveys will be identified in the construction management plan checklist.

Existing roads will be used unless other options will produce less long-term sediment. Reconstruct for long-term soil and drainage stability.

Vegetative buffers will be maintained adjacent to intermittent or perennial drainages and wetlands, to the extent possible. Where avoidance of the vegetative buffer is not possible, disturbance will be minimized.

When logging over-the-snow (except in locations described above), conditions should allow for 1 foot of packed snow to be continuous (i.e., not patchy) and competent enough so that wheeled or tracked vehicles do not break through. When logging over frozen ground, a minimum of 3 inches of continuous frozen ground should be present.

Maintain a no net disturbance through offsets and reclamation projects.

Do not encroach fills or introduce soil into streams, swales, lakes, or wetlands. Install sediment waddles, sediment fencing, retention basins, or other applications before ground-disturbing activities begin. Favor applications that maintain functionality without maintenance, such as sediment retaining wattles.

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Service sediment retention applications before leaving the site and remove non-natural and non-biodegradable materials. Favor applications that use natural or biodegradable materials that can be left on-site.

Biomass management strategies (chipping/mastication) should adhere to the following protocol:

- Based on literature review and the best available science, wood chip depth shall not exceed a maximum depth of 3 inches (7.5 cm) and should be applied at a relatively uniform thickness. Rake by hand as necessary to achieve uniform application.
- Incorporate needles and/or leaves into chipped biomass to balance nutrient content of wood chips and to mimic the carbon to nitrogen (C:N) ratio of the native forest floor. Ideally, the C:N of applied biomass material should be less than 30:1.
- Avoid operations with chipping/mastication equipment during periods of excess soil moisture. Use broad, sweeping turns with equipment, as practicable, to avoid rutting and displacement of soil.
- Monitor for invasive weeds following operations with chipping/mastication equipment, particularly Canada thistle (*Cirsium avense*).

#### WILDLIFE

To minimize impacts to Canada lynx and their nocturnal movements, regular snow grooming operations within the Beavers Project Area (below treeline) should be focused outside the hours of 10 p.m. to 4 a.m. It is anticipated that A-Basin will need to conduct grooming during this period on an infrequent basis throughout the ski season. The annual winter operating plan will consider this measure on an annual basis and may be adjusted over time as knowledge of grooming practices are better understood, with the consideration of minimizing impacts to Canada lynx.

The traverse and egress lines in the Beavers and Steep Gullies will be roped and marked with signs to discourage skier use below the emergency egress route. Signs will indicate the operational boundary and will direct skiers back to the Pallavicini chairlift.

Vegetation removal for flat portions of the emergency egress and hike-back routes will be conducted over-the-snow with at least a 3-foot snowpack and prior to May 1, when boreal toads are inactive. There is no time restriction associated with subsequent stump clearing as long as vehicles are not used.

Snowcat use of the emergency egress route should be limited to the period when boreal toads are inactive (November 1 to May 1). Exceptions may be approved on a case-by-case basis as determined by the Forest Service aquatic biologist based on snow conditions and with consideration for toad movements.

The canopy tour operation will be limited from 9 a.m. to 4 p.m. in the summer and fall to minimize disturbance to bighorn sheep, elk and deer. Exceptions must be verified on a case-by-case basis with the WRNF.

Surveys for the denning/nesting of threatened, endangered, and sensitive species will be conducted by a qualified biologist prior to construction season if construction activities are proposed prior to July 15. Construction of approved projects shall occur, to the extent practicable, outside the active denning/nesting period or as otherwise approved by the Forest Service Responsible Official.

Lift construction, tree thinning, and future maintenance would not occur between the closing of the ski area for the season and June 15.

Surveys for active migratory birds' nests will be conducted by a qualified biologist prior to construction season if tree cutting activities are proposed prior to July 15. Retain trees with active nests when practicable while occupied. When possible retain snags that are providing cavity nesting habitat.

If flamulated or boreal owl nests are located within project areas, direct mortality of eggs and/or nestlings shall be avoided by conducting tree removal in nesting habitat outside of the May 21 to July 15 nesting period, or as otherwise approved by the Forest Service Responsible Official.

If olive-sided flycatcher nests are located within project areas, direct mortality of eggs and/or nestlings shall be avoided by conducting tree removal in nesting habitat outside of the June 1 to July 15 nesting period, or as otherwise approved by the Forest Service Responsible Official.

Surveys for active raptor nests/cavities will be conducted by a qualified biologist prior to construction season if construction is to occur prior to July 31. To allow for successful nesting and young rearing, no project ground disturbing activities or tree cutting shall be allowed within 0.25 mile of active raptor

#### **Project Design Criteria Incorporated into the Selected Alternative**

nests/cavities until after July 31, or if fledging has occurred (confirmed by a qualified biologist), or as otherwise approved by the Forest Service Responsible Official.

To avoid disturbances to active ptarmigan nests, staked disturbance areas above treeline will be surveyed for nests after snowmelt (no earlier than June 23) and before construction. Should an active nest be identified in a disturbance area, A-Basin must consult with the Forest Service biologist to determine methods to avoid impact.

To reduce the risk for human/wildlife conflicts in areas where food or trash could be present, all trash containers must be bear proof and any locations that have food products stored outside of a building must have bear proof food containers.

During construction of the facility, contractors are required by Summit County code to provide a bear proof container on site for all edible and food related trash in order to minimize conflicts with black bears. No food products or food containers can be thrown in the larger roll-off type dumpsters.

Any new summer use developments must adhere to the Colorado Parks and Wildlife bear safety guidelines: Be Bear Aware.

All construction activities will be confined to daylight hours, excluding emergencies.

Workers will not bring dogs on site during construction.

No food or drink will be stored in construction vehicles. All windows must be kept closed and doors locked on all vehicles to prevent bear entry.

Reduce sediment sources (CDA) on existing and proposed trails and stream crossings to prevent impact to aquatic species.

#### WATER RESOURCES

Prepare detailed site plans where summer uses would concentrate foot traffic or ground transport into high traffic areas. Design sites for proper drainage and to be resistant to erosion associated with the intended traffic. Incorporate native vegetation into site plans.

Prior to implementation, develop and initiate a water quality monitoring program, including baseline water quality monitoring, monitoring during construction, and monitoring during subsequent years at the discretion of the Forest Service hydrologist. This water quality monitoring would be specific to North Fork Snake River.

For ground-disturbing activities near perennial and intermittent streams, and ephemeral draws, minimize CDA by ensuring that roads, road ditches, and other disturbed areas drain to undisturbed soils rather than directly to streams and ephemeral draws. Manipulate drainage from disturbed areas as necessary using natural topography, rolling dips, waterbars, ditch-relief culverts, etc., to disconnect disturbed areas from streams.

## Table ROD-2: Project Design Criteria Incorporated into the Selected Alternative

To disconnect CDAs, A-Basin will implement the following actions:

- 1. At approximately 550 feet from the gate near Highway 6, the road-side ditch flows into a 24-inch culvert which discharges directly into a stream tributary to the North Fork Snake River. Disconnect the road and ditch from the stream system by implementing the following BMP for erosion and sediment control:
  - Properly install and maintain three rock check dams in the ditch, immediately before the culvert, and at 25 and 50 feet upstream; construct the check dams with Type L riprap ( $D_{50} = 9$  inches).
- 2. A 240-foot-long section of roadside ditch just above the second switchback (approximately 1,370 feet from the gate) drains directly into a small tributary to North Fork Snake River. Disconnect the road and ditch from the stream system by implementing the following BMPs for erosion and sediment control:
  - Design, construct and maintain a sediment trap at the discharge of the road-side ditch to detain sediment before it reaches the stream. Inspect the sediment trap at least once annually; remove and properly dispose accumulated sediment as required.
  - Properly install and maintain two rock check dams in the ditch, at 25 and 50 feet upstream from the sediment trap; construct the check dams with Type L riprap ( $D_{50} = 9$  inches).
- 3. A perennial stream tributary to North Fork Snake River crosses under the mountain road through a 48-inch diameter culvert about 2,050 feet from the gate. The adjacent road-side ditch discharges directly into the stream. Disconnect the road and ditch from the stream system by implementing the following BMPs for erosion and sediment control:
  - Design, construct and maintain a sediment trap at the discharge of the road-side ditch to detain sediment before it reaches the stream. Inspect the sediment trap at least once annually; remove and properly dispose accumulated sediment as required.
  - Properly install and maintain two rock check dams in the ditch, at 25 and 50 feet upstream from the sediment trap; construct the check dams with Type L riprap ( $D_{50} = 9$  inches).

Keep heavy equipment out of streams except to cross at locations designated by the Forest Service. Avoid in-stream work except to build approved crossings or complete restoration work. Add or remove rocks, wood, or other material in streams only if such actions maintain or improve stream health. Avoid altering the stream bed and banks and maintain the natural character of the stream.

Do not install culverts or conduct ground-disturbing activities near streams during spring runoff, or during periods of heavy precipitation.

Do not locate roads, trails, or other disturbed areas on slopes that show signs of instability, such as slope failure, mass movement, or slumps.

For projects that would increase road traffic, or require road use by heavy construction equipment, apply road surfacing near stream crossings as needed to harden the road surface in order to minimize rutting and sediment delivery to streams.

Keep all debris generated by project activities out of streams and ditches.

Prior to implementation of the grading projects proposed to be constructed within the WIZ, site visits to the project areas will be completed by Forest Service personnel or a qualified specialist. The purpose of the site visits will be to field-fit and flag areas to be graded in the vicinity of stream channels to ensure tree removal and grading in the WIZ is minimized to the extent possible.

Upon completion of these site visits, A-Basin shall prepare site-specific erosion control plans for review by a Forest Service hydrologist and/or soil scientist (or a qualified specialist). The erosion control plans shall show the proposed surface drainage slope and direction, and specify the type and location of erosion control BMPs.

To the maximum extent possible, use existing roads to access project sites.

Avoid routing canopy tour walking trails and temporary construction access paths directly down the fall line.

#### **Project Design Criteria Incorporated into the Selected Alternative**

Reclaim temporary disturbed areas promptly to prevent resource damage and invasion of noxious weeds. Ensure proper drainage, rip compacted areas, and apply a Forest Service-approved seed mix and fertilizer to facilitate re-vegetation. Areas compacted by construction activities may require mechanical scarification to reduce bulk density and restore soil porosity.

To the extent possible, maintain vegetative buffers adjacent to perennial or intermittent stream channels and wetlands.

Soil-disturbing activities will be avoided during periods of heavy rain or excessively wet soils.

Do not store excavated materials in the WIZ.

Before construction of grading projects, clearly define grading limits on the ground by placing a physical barrier, such as wattles or construction fence, along the perimeter of the area to be graded.

Properly design, install, and maintain all BMPs for erosion and sediment control. Remove non-natural and non-biodegradable materials before leaving the site following construction.

#### PUBLIC INVOLVEMENT

A scoping notice, dated November 21, 2013, was mailed to approximately 50 community residents, interested individuals, public agencies, and other organizations. The information within the notice provided a brief description of the proposal, the Purpose and Need for action, and an illustrative map. This notice was specifically designed to elicit comments, concerns, and issues pertaining to the proposal. A Notice of Intent (NOI) to prepare an Environmental Impact Statement was published in the *Federal Register* on December 4, 2013. Comments were accepted from the following sources: email, web submission, letter, public meetings, fax, and phone. During the scoping period, the WRNF received approximately 15 comment submittals.

A Notice of Availability for the DEIS was published in the *Federal Register* on February 5, 2016. The DEIS was released for public review and comment for a 45-day comment period which extended through March 21, 2016. During the comment period, one public meeting was held on March 2, 2016. At this meeting, the Forest Service provided an overview of the NEPA process and the DEIS, answered questions from the public, and accepted comments from the public. The document was discussed via multiple media outlets, including a press release to the Summit Daily News and other news sources, and was available on the Forest Service website. In response to the DEIS, approximately 100 comments letters (letters, emails, public meeting forms) were received from interested parties—both oppositional and supportive.

#### **CONSIDERATION OF OTHER ALTERNATIVES**

NEPA requires that a range of reasonable alternatives to the Proposed Action be developed and analyzed. By definition, alternatives must meet the Purpose and Need while responding to issues identified during scoping. Therefore, in response to internal and external scoping, the Forest Service Interdisciplinary (ID) Team considered issues that will generate alternatives to the Proposed Action. Both CEQ Regulations and Forest Service Handbook direction emphasize that alternatives must meet the "reasonableness" criteria in order to warrant detailed analysis.

I am confident that the ID Team considered a reasonable range of alternatives early in the NEPA process, and that the two alternatives, including the required No Action Alternative, analyzed in the FEIS are adequate for the scope and scale of this project. Consideration of the full range of alternative considered, including those dismissed, with rationale, is included in the FEIS.

#### **ALTERNATIVE 1 – NO ACTION**

As required by NEPA, a No Action Alternative was included in this analysis for review alongside the action alternatives. <sup>6</sup> By definition, the No Action Alternative represents a continuation of existing

<sup>&</sup>lt;sup>5</sup> USDA Forest Service. 2012. Forest Service Handbook 1909.15: National Environmental Policy Act Handbook, Chapter 10, Section 12.33 and 14.

<sup>&</sup>lt;sup>6</sup> 40 CFR 1502.14(d). 1978. Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, as amended July 1, 1986.

management practices without changes, additions, or upgrades to existing conditions. The No Action Alternative is depicted in Figure 2 of the FEIS.

The No Action Alternative provides a baseline for comparing the effects of the action alternatives. The No Action Alternative essentially reflects a continuation of existing management practices without changes, additions, or upgrades. No new facilities or recreational activities are included.

#### **ENVIRONMENTALLY PREFERABLE ALTERNATIVE**

In accordance with CEQ regulations, I am required to identify the alternative or alternatives that could be considered environmentally preferable (40 CFR 1505.2[b]). Forest policy (FSH 1909.15, Section 05) defines "environmentally preferable" as:

"... is the alternative that will best promote the national environmental policy as expressed in NEPA's section 101 (42 USC 4321). Ordinarily, the environmentally preferable alternative is that which causes the least harm to the biological and physical environment; it also is the alternative which best protects and preserves historic, cultural, and natural resources. In some situations, there may be more than one environmentally preferable alternative."

Based on the review of the alternatives, Alternative 1 (the No Action Alternative) is the environmentally preferable alternative. Alternative 1 is identified as the environmentally preferable alternative because, by its nature, it is not accompanied by any of the acknowledged impacts to the human or biological environment associated with Alternative 2.

## FINDINGS REQUIRED BY LAWS, REGULATIONS AND AGENCY POLICY

This approval is consistent with the intent of the 2002 WRNF Forest Plan's long-term goals and objectives. The project was designed in conformance with 2002 WRNF Forest Plan forest-wide management direction and incorporates appropriate Forest Plan guidance for ski areas—existing and potential.

As Forest Supervisor for the WRNF, I am required to manage the Forest in accordance with applicable laws and regulations. This authority, which includes approval of ski area projects, is delegated to me through agency policy described in FSM 1200. In reviewing the FEIS, I have concluded that my decision is consistent with all relevant laws, regulations and requirements. This includes, but is not limited to:

- 2011 Ski Area Recreation Opportunity Enhancement Act of 2011
- Americans with Disabilities Act (ADA) of 1990

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<sup>&</sup>lt;sup>7</sup> USDA Forest Service. 2002. White River National Forest Land and Resource Management Plan 2002 revision. White River National Forest, Glenwood Springs. CO.

- American Indian Religious Freedom Act of 1978
- Archaeological Resource Protection Act of 1978
- Clean Air Act of 1990, as amended
- Clean Water Act of 1977, as amended
- Endangered Species Act of 1973, as amended, including consultation resulting in a Biological Opinion signed April 27, 2012.
- Fish and Wildlife Coordination Act of 1934, as amended
- Forest and Rangeland Renewable Resources Planning Act of 1974
- Multiple-Use Sustained Yield Act of 1960
- National Environmental Policy Act of 1969, as amended
- National Forest Management Planning Act of 1976
- National Forest Ski Area Permit Act of 1986, as amended
- National Historic Preservation Act of 1966, as amended
- Organic Administration Act of 1897, as amended
- Protection of Wetlands Executive Order 11990

In addition to requisite Forest Service approvals, consultation with the following entities, or permits, may be required to implement any approved projects:

- USFWS Endangered Species Act (ESA) Section 7 Consultation
- USACE Clean Water Act (CWA) Section 404
- State of Colorado, Stormwater Management Plan
- Summit County Construction Permit
- Summit County Burn Permit
- Colorado Department of Public Health and Environment (CDPHE) Air Permit.

#### OBJECTION PROVISIONS AND IMPLEMENTATION DATE

This proposed project is subject to the objection process pursuant to 36 CFR 218, subparts A and B. Objections will only be accepted from those who have previously submitted specific written comments regarding the proposed project during scoping or the DEIS public review and comment period, in accordance with 36 CFR §218.5(a). Issues raised in objections must be based on previously submitted, timely and specific written comments regarding the proposed project unless based on new information arising after the designated comment opportunities.

Incorporation of documents by reference is not allowed, except for the following items that may be referenced by including date, page, and section of the cited document, along with a description of its content and applicability to the objection: 1) All or any part of a federal law or regulation; 2) Forest

Service directives and land management plans; 3) Documents referenced by the Forest Service in the proposed project environmental analysis document that is subject to objection. All other documents must be included with the objection.

At a minimum, an objection must include the following: objector's name and physical mailing address; signature or other verification of authorship upon request; identification of the lead objector when multiple names are listed; name of the proposed project; name and title of Responsible Official; and name of national forest unit(s) on which the project will be implemented (36 CFR §218.8[d]).

Objections, including attachments, must be filed via mail, fax, email, hand-delivery, express delivery, or messenger service (Monday through Friday, 8:00 a.m. to 4:30 p.m., excluding holidays) to: Reviewing Officer, Jacqueline A. Buchanen, Acting Regional Forester, USDA Forest Service, Rocky Mountain Region, 740 Simms, Golden, CO 80401; FAX: (303) 275-5134, or email: r02admin\_review@fs.fed.us.

Objections must be submitted within 45 calendar days following the publication of a legal notice in the Glenwood Post Independent. The publication date in the newspaper of record is the exclusive means for calculating the time to file an objection. Those wishing to object should not rely upon dates or timeframe information provided by any other source. The regulations prohibit extending the time to file an objection.

It is the objector's responsibility to ensure timely filing of a written objection with the reviewing officer pursuant to 36 CFR §218.9, which includes: date of U.S. Postal Service postmark or shipping date for delivery by private carrier for an objection received before the close of the fifth business day after the objection filing period; agency's electronpically generated date and time for email and facsimiles; or official agency date stamp showing receipt of hand delivery. All objections are available for public inspection during and after the objection process.

#### CONTACT PERSON

For additional information concerning this Record of Decision, the FEIS, or the Forest Service predecisional objection process, contact:

Matt Ehrman, Project Leader White River National Forest 900 Grand Avenue Glenwood Springs, CO 81601 mehrman@fs.fed.us

Responsible Official:		
Scott Fitzwilliams, Forest Supervisor White River National Forest	Date	

